

SEMINARIO DEL GIOVEDÌ' CETEMPS

“Detection of hail and cloud-to-ground lightning events using a low-cost and portable X-band weather radar”

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Sala riunioni 1° piano, Coppito 1, Università degli Studi dell’Aquila, Via Vetoio, L’Aquila
(<http://cetemps.aquila.infn.it/evento/vincenzo-capozzi>)

ABSTRACT

Single-polarization X-band weather radar, although with some wellknown limitations, can provide exploitable information about the physical processes that participate in thunderstorm electrification and hailstones growth. In this work, new methods for hail and cloud-to-ground (CG) lightning events detection have been proposed, combining single-polarization reflectivity measurements with conventional atmospheric data. Links between the presented techniques and those under developing in the AdriaMORE project will be analyzed and discussed during the seminary.

Biografia.

Vincenzo Capozzi was born in Avellino (Italy) in 1986. He pursued his higher education in Climate Science “Magna Cum Laude” at the University of Naples “Parthenope” in 2012. After master’s degree, he was accepted into the PhD program of the University of Naples “Parthenope”. He defended his PhD thesis titled “X-band weather radar measurements: raingauge-based adjustment and meteorological applications” in 2016. Furthermore, he received a Professional Certification (in comply with the recommendations of World Meteorological Organization) as Meteorologist. Vincenzo Capozzi is currently working as post-doctoral researcher at the Department of Science and Technology of the University of Naples “Parthenope” and as broadcast meteorologist at RAI – Radiotelevisione Italiana. His research interests are mainly focused on operational applications of weather radar products and on the reconstruction and analysis of Mediterranean climate variability